

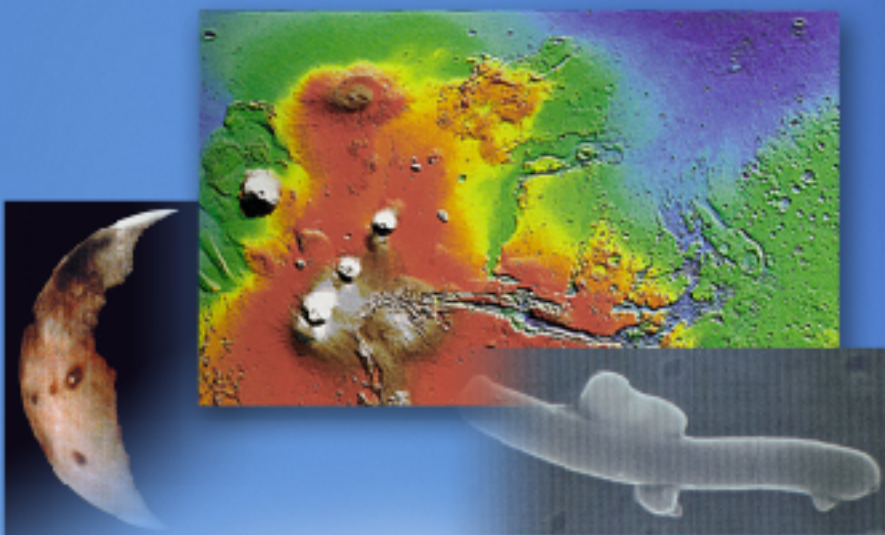
Free Public Lecture:

ARSENIC

A lurid tale of microbes, Mono Lake, Mars, and melanoma

By Ronald S. Oremland, Senior Research Scientist

- Some recently discovered microorganisms grow and gain energy by metabolizing arsenic, known and used by humans as a poison
- Arsenic-metabolizing organisms thrive in Mono Lake, which is fed arsenic-rich water by volcanic hot springs
- Arsenate-respiring bacteria live in the intestines of diverse animals, such as termites, cows, and hamsters—are they also in the human gut?
- In the body, inorganic arsenic ions are methylated and become carcinogens
- Could arsenic metabolism provide a basis for life without oxygen on Mars or Europa?



Thursday, December 13, 2001, 7:00 p.m.
USGS, Building Three, Menlo Park, CA

The Earth Science Information Center (Map and Publication Sales) in Building Three will remain open until 7:00 p.m. on the evening of the lecture. See other side for USGS site map.

For information on USGS public events, call (650) 329-5000 or visit our website at <http://online.wr.usgs.gov/calendar/>
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